

**In the Claims:**

**Claim 1 (currently amended):** A semiconductor workpiece, comprising:

a metal layer, wherein the metal layer has topical non-planarities extending from the metal layer;

an inorganic dielectric ARC layer disposed directly on the metal layer and directly on the topical non-planarities extending from the metal layer, wherein said inorganic dielectric ARC layer functions as a hard mask, and wherein said inorganic dielectric ARC layer has a substantially uniform thickness over the topical non-planarities extending from the metal layer; and

a photoresist layer disposed on the ARC layer opposite the metal layer.

**Claim 2 (original):** The workpiece recited in claim 1 wherein the ARC layer comprises silicon oxynitride.

**Claim 3 (original):** The workpiece recited in claim 2 wherein the ARC layer consists essentially of silicon oxynitride.

**Claim 4 (canceled).**

**Claim 5 (currently amended):** The workpiece recited in claim [4]1 wherein the ARC layer is deposited on the metal layer by chemical vapor deposition.

**Claim 6 (original):** The workpiece recited in claim 5, wherein the ARC layer is deposited on the metal layer by plasma enhanced chemical vapor deposition.

**Claim 7 (original):** The workpiece recited in claim 1 wherein the photoresist layer is between 0.1 to 2 microns thick.

**Claim 8 (currently amended):** The workpiece recited in claim 7 ~~where in~~wherein the photoresist layer is 0.6 to 1.0 microns thick.

**Claim 9 (currently amended):** A metallic stack for a semiconductor interconnect, comprising:

a metal layer, wherein the metal layer has topical non-planarities extending from the metal layer;

an inorganic dielectric ARC layer disposed directly on the metal layer and directly on the topical non-planarities extending from the metal layer, wherein said inorganic dielectric ARC layer functions as a hard mask, and wherein said inorganic dielectric ARC layer has a substantially uniform thickness over the topical non-planarities extending from the metal layer; and

a barrier layer disposed on the metal layer opposite the ARC layer.

**Claim 10 (original):** The metallic stack recited in claim 9 wherein the ARC layer comprises silicon oxynitride.

**Claim 11 (original):** The metallic stack recited in claim 10 wherein the ARC layer consists essentially of silicon oxynitride.

**Claim 12 (canceled).**

**Claim 13 (currently amended):** The metallic stack recited in claim ~~12~~9 wherein the ARC layer is deposited on the metal layer by chemical vapor deposition.

**Claim 14 (original):** The metallic stack recited in claim 13 wherein the ARC layer is deposited on the metal layer by plasma enhanced chemical vapor deposition.

**Claim 15 (previously presented):** The metallic stack recited in claim 9 wherein the stack is about 1,000 to 20,000 Angstroms thick.

**Claim 16 (previously presented):** The metallic stack recited in claim 15 wherein the stack is about 5,000 to 8,000 Angstroms thick.

**Claim 17 (previously presented):** A semiconductor device, comprising:

an oxide layer formed on a wafer; and

at least one microelectronic structure extending from the oxide layer and including:

a barrier layer disposed on the oxide layer;

a metal layer disposed on the barrier layer;

an inorganic dielectric ARC layer disposed directly on the metal layer, wherein said inorganic dielectric ARC layer functions as a hard mask; and

a residual photoresist layer disposed directly on said inorganic dielectric ARC layer.

**Claim 18 (canceled).**

**Claim 19 (original):** The semiconductor device recited in claim 17 wherein the ARC layer consists essentially of silicon oxynitride.

**Claim 20 (original):** The semiconductor device recited in claim 19 wherein the ARC layer is formed by plasma enhanced chemical vapor deposition.